

TCH Evidence-Based Outcomes Center

Diagnosis and Management of Primary Spontaneous Pneumothorax

Inclusion Criteria:

Initial or recurrent spontaneous pneumothorax in otherwise healthy patients

Exclusion Criteria:

Underlying chronic lung disease, explained pneumothorax (e.g., traumatic, iatrogenic, or resulting from birth)

^If tension pneumothorax is suspected at any time, notify Emergency Medicine and Surgery attendings. If unstable, perform needle thoracostomy.

*The size of the pneumothorax is less important than the degree of clinical compromise.

For children >12 years, a pneumothorax is considered 'large' based on the following measurements:

- Measurement of the vertical distance between the lung and thoracic cage at the apex (a); if ≥ 3 cm, pneumothorax is large
- OR
- Measurement of the distance between the lateral lung edge and chest wall at the level of the hilum (b); if >2 cm, pneumothorax is large

